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Notice of Allowability	Application No.	Applicant(s)	
	10/722,806	EL RIFAI ET AL.	
	Examiner	Art Unit	
	Suezu Ellis	2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to November 18, 2005.
2. ☒ The allowed claim(s) is/are 1-36.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Tony Moosey on December 13, 2005.

The application has been amended as follows:

In claim 1, after "comprising:" (line 2) and before "applying an input signal" (line 3), insert --measuring a first value indicative of an acceleration sensitivity of a flexible structure;--.

In claim 1, line 5, replace "measuring a value indicative" with --measuring a second value--.

In claim 1, line 5, replace "of a flexible structure" with --of the flexible structure--.

In claim 1, line 6, replace "movement based on an acceleration sensitivity of the flexible structure;" with --movement, the second value being based on the first value;--.

In claim 19, line 8, replace "acceleration based on an acceleration sensitivity of the flexible structure;" with --acceleration, the value being based on a measurement indicative of an acceleration sensitivity of the flexible structure;--.

In claim 35, line 7, replace "acceleration based on an acceleration sensitivity of the flexible structure;" with --acceleration, the value being based on a measurement indicative of an acceleration sensitivity of the flexible structure;--.

The following is an examiner's statement of reasons for allowance:

With respect to claim 1, prior art fails to teach or reasonably suggest a method of calibrating a scanning probe microscope comprising measuring a first value indicative of an acceleration sensitivity of a flexible structure and measuring a second value indicative of deflection of the flexible structure that is attached to an actuator, as a result of the actuator movement, the second value based on the first value, in addition to the other limitations of the claim.

With respect to claim 15, prior art fails to teach or reasonably suggest a method of characterizing a sample using a scanning probe microscope comprising using a map to adjust input signals to an actuator to produce a vertical displacement wherein the map comprises a mapping of input signals to the actuator to corresponding vertical displacement values obtained during a calibration by applying input signals and measuring the deflection of a calibration cantilever, in addition to the other limitations of the claim.

With respect to claim 16, prior art fails to teach or reasonably suggest a method of characterizing a sample using a scanning probe microscope comprising mapping of input signals to the actuator to corresponding vertical displacement values obtained by

applying input signals and measuring a deflection of a flexible structure, in addition to the other limitations of the claim.

With respect to claim 19, prior art fails to teach or reasonably suggest a scanning probe microscope calibration apparatus comprising a second circuit to provide a value indicative of deflection of a flexible structure, as a result of an actuator acceleration, the value being based on a measurement indicative of an acceleration sensitivity of the flexible structure, in addition to the other limitations of the claim.

With respect to claim 30, prior art fails to teach or reasonably suggest a scanning probe microscope comprising a controller configured with a map for adjusting input signals to an actuator used to produce vertical displacement wherein the map comprises a mapping of input signals to the actuator to corresponding vertical displacement values by applying input signals and measuring a deflection of a calibration cantilever, in addition to the other limitations of the claim.

With respect to claim 32, prior art fails to teach or reasonably suggest a scanning probe microscope comprising a controller configured with a map for use in connection with sample characterization to compensate for nonlinear vertical displacement of an actuator wherein the map comprises a mapping of input signals to the actuator to corresponding vertical displacement values obtained by applying input signals and measuring a deflection of a flexible structure, in addition to the other limitations of the claim.

With respect to claim 35, prior art fails to teach or reasonably suggest an article comprising obtaining a value indicative of deflection of a flexible structure, as a result of

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an actuator acceleration, the value being based on a measurement indicative of an acceleration sensitivity of the flexible structure, in addition to the other limitations of the claim

Claims not specifically addressed would be allowable due to their dependency.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Telephone/Fax Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suez Ellis whose telephone number is (571) 272-2868. The examiner can normally be reached on 8:30am-5pm (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Stephone B. Allen
Primary Examiner